# FINDING OF NO SIGNIFICANT IMPACT (FONSI)

# STATE ROUTE 80 EXTENSION ON NEW LOCATION OVER TRIBUTARIES OF THE CLARKS RIVER AND OTHER TRIBUTARIES OF THE TENNESSEE RIVER, CALLOWAY COUNTY, KENTUCKY

## **Purpose and Need**

The Kentucky Transportation Cabinet (KYTC) proposes to extend Kentucky State Route 80 (KY 80) 2.6-miles from Station 500+000 to Station 513+853 on a new right-of-way from existing US 641 north of Murray to KY 1836 north of Coldwater. The new route would be an extension of existing KY 80 and would be constructed across unnamed tributaries of the Clarks River, East Fork Rockhouse Creek, Cooks Branch, and West Fork Clarks River, northwest of Murray, in Calloway County, Kentucky. The state funded construction project would require the filling of nine separate wetland areas and the crossing of 42 individual stream channels with 36 culverts and several minor associated alignment relocations. The roadway would provide alternative access to county roads in the area, would improve commerce, and benefit to the local economy and community.

As a requirement for the project, the U.S. Army Corps of Engineers (USACE) would have to issue a permit under Section 404 of the Clean Water Act for the placement of dredge and fill material in waters of the United States (U.S.) including wetlands. Since the placement of culverts in streams and bridges over streams involves construction of permanent obstructions to tributaries of the Tennessee River and their floodplains, approval would also be required from the Tennessee Valley Authority (TVA) under Section 26a of the TVA Act. Section 26a permits would be issued for 4 bridges, 36 culvert installations, and 6 stream relocations.

Because the KY 80 extension project is a new location roadway with extensive stream and wetland alteration, USACE and TVA decided to prepare an environmental assessment (EA) on the impacts of the proposal. TVA was a cooperating agency in the development of the USACE EA.

## **Alternatives**

The USACE EA evaluates the environmental consequences of three alternatives; No Action, the Proposed Action, and Appropriate Mitigation to Proposed Action. Under No Action, TVA would deny the permit application. No widening or other improvements to the existing highway would be made other than routine maintenance activities. Future traffic congestion would likely worsen over time and enhanced access to other parts of Calloway County, including some of its communities as well as commerce, business, and educational institutions would not be provided. KYTC may elect to use the existing county roads in the area, widen other existing roads, or find a new alignment for KY 80.

Under the Proposed Action, KYTC would construct the preferred alternative as described in Public Notice 05-45 included in Appendix A of the attached USACE EA. According to KYTC, due to heavy traffic flows that move through this area, this roadway needs to be extended and improved. As proposed, the 2.6 mile extension of KY 80 would require the crossing of many small stream channels with culverts and minor associated relocations as well as filling nine separate wetland areas. Stream impacts would be mitigated by payment into the state of Kentucky in-lieu fee stream mitigation program. The wetland fill would be mitigated at an approved Mitigation Site at a 2:1 ratio (see Wetland and Stream Mitigation Plans in Appendix B of the attached USACE EA). Under the Appropriate Mitigation to Proposed Action alternative, other special conditions to minimize environmental impacts from the proposed action would be required. Efforts will be made during the planning and design phases of the project to avoid impacts to the waters of the U.S. to the extent practicable, and to minimize impacts that are not avoidable. KYTC plans to include mitigation as a part of the proposed action, and additional mitigation measures for the proposed project are listed in Section 5.5 of the USACE EA.

## **Affected Environment and Impacts**

The project would affect land in western Calloway County, Kentucky. The dominant use of this land is agriculture. Drained by the East and West Fork Clarks River and their tributaries, streams in the area have been affected by past land use. Narrow hardwood riparian buffers occur along some streams and hardwood woodlots are scattered across this rural landscape. The right-of-way for the proposed highway extension has been acquired. Impacts on common environmental resources or natural features would be minor and insignificant. The project would result in an increased capacity and traffic volumes and, other than temporarily during construction, noise levels would not significantly increase within this rural environment. The proposed action causes minimal impacts on aesthetics and causes no residential relocations. No air or land emissions of pollutants, hazardous waste or wastes requiring special handling and disposal, or significant negative social or socioeconomic impacts are anticipated.

Many terrestrial wildlife species common to areas dominated by agricultural land and generally abundant in the region occur in the vicinity of the highway improvement project. No cave or cave openings were observed in or adjacent to the project area. By letter dated February 9, 2006, the U.S. Fish and Wildlife Service (USFWS) concurs that the proposed action is not likely to adversely affect the federally listed gray bat, Indiana bat, Price's potato bean, or bald eagle; and that requirements of Section 7(c) of the Endangered Species Act of 1973, as amended, are fulfilled. In its initial comment letter dated November 30, 2005, USFWS recognized USACE and TVA as other federal action agencies required to authorize the project.

The project would also result in the loss of 8.25 acres of wetlands at 9 sites; and includes alteration of a mixture of forested, scrub-shrub, and emergent wetlands types at various locations along the corridor. In its comments, USFWS further indicated that the project would have no significant adverse effects to fish and wildlife, their habitats and human uses of these resources provided stream and wetlands losses were

mitigated. Accordingly, USFWS had no objections to the issuance of a permit for the work. By letter dated February 9, 2006, the USFWS also requested that trees only be removed from the Cotton Riley Mitigation Site between October 15 and March 31 in order to avoid impacting summer roosting Indiana bats. Also, as requested by USFWS and Kentucky Department of Fish and Wildlife Resources (KDFWR), wetland impacts would be mitigated at a 2:1 ratio to help ensure a "no net loss" and improve conservation of wetland wildlife habitat. See Appendix C in the attached USACE EA for agency comments and KYTC biological assessment (BA).

KYTC proposes to mitigate for stream or special aquatic site losses by replacement of those values with a one time payment of \$280,000 to KDFWR, Kentucky Stream Mitigation Fund (In-Lieu Fee Program) for impacts on Site #22 (990 feet), Site #28 (383 feet), Site #39 (503 feet), Site #44 (486 feet), and Site #48 (457 feet). This totals 2,819 feet of stream loss. KDFWR would use the money to fund restoration or enhancement of selected streams in the area. KYTC would mitigate a total of 8.25-acres of wetland loss by debiting 16.5 acres of mitigation credit (2:1 ratio) from the approved 50-acre Cotton Riley Wetland Mitigation Site.

By letter dated October 25, 2005, the Kentucky Heritage Counsel (KHC) indicated that the project would not affect any resources eligible for listing in the National Register of Historic Places (NRHP). KHC had no objections to the proposal. By letter dated February 22, 2006, Environmental and Public Protection Cabinet, Department of Environmental Protection issued, pursuant to Section 401 of the Clean Water Act, Water Quality Certification #2006-0029-2 that contains specific conditions designed to avoid or minimize impacts of turbidity and erosion. This certifies that the State of Kentucky has reasonable assurances that this project will not violate its water quality standards (Appendix D of the USACE EA). Use of best management practices are also included in the USACE authorization and would also be in the TVA Section 26a permit.

## **Public Review**

On June 17, 2005, Public Notice 05-45 (see Appendix A) was issued to announce the receipt of a USACE application for the proposed highway extension work and solicit comments from agencies and the interested public. No comments were received from adjacent property owners or general public. Comments were received from KDFWR, KHC, and USFWS. All responses are included in Appendix C of the attached USACE EA.

KDFWR and USFWS initially had concerns about the proposed 1:1 wetland impacts mitigation ratio indicated in the notice along with other recommendations. KDFWR recommended that KYTC utilize the in-lieu fee program for the stream impacts as a last resort. KDFWR also recommended that removal of suitable Indiana bat roost trees associated with the proposed project should only be accomplished between October 15 and March 31 in order to avoid impacting summer roosting bats. KDFWR also recommended that silt erosion control measures should be implemented prior to construction to minimize sedimentation of waterways in the project areas. As noted above, following further discussions among the agencies, KYTC has agreed to these conditions, including modifying the wetlands mitigation plan to include a 2:1 replacement ratio. Because there was no practicable alternative to allow for on-site

mitigation, KYTC also decided to use the Kentucky In-Lieu Fee Program to offset the loss of stream habitat.

# Mitigation

TVA's Section 26a approval is contingent upon successful implementation of Best Management Practices (BMPs) for erosion and sediment control including TVA General Conditions 1, 9, and 10, and Standard Conditions 3c, and 6a, 6c through 6i. Included among conditions in the attached USACE EA, relocated stream flows shall be fully diverted to the new culvert/channel prior to filling the old. Earthen plugs will be left intact at the upstream and downstream segments of the relocated channel, until the new channel is stabilized. Culverts installation and associated alignment relocation work shall be performed in the dry, during low flow conditions. Also, in accordance with permit conditions included in the USACE EA, disturbance to riparian vegetation shall be kept to a minimum during construction, and appropriate sediment control shall be utilized to protect water quality and aquatic organisms.

KYTC will abide by the terms and conditions of the wetland mitigation strategy set forth in its final Wetlands and Streams Mitigation Plans. This includes mitigating a total of 8.25-acres of wetland loss by debiting 16.5 acres of mitigation credit from the approved Cotton Riley Wetland Mitigation Site. Trees from this site will only be removed from the Cotton Riley Site between October 15 and March 31 to avoid the potential for impacting the federally endangered Indiana bats. KYTC will mitigate for stream or special aquatic site losses by payment of \$280,000 to KDFWR, Kentucky Stream Mitigation Fund (In-Lieu Fee Program). KYTC will also comply with Water Quality Certification #2006-0029-2 that contains specific conditions designed to avoid or minimize impacts of turbidity and erosion. This includes KYTC making the KDFWR in-lieu fee payment no later than December 31, 2006, and submitting proof of payment to the Kentucky Division of Water at that time.

## Conclusion and Findings

TVA has independently reviewed the USACE EA and concluded that it adequately addresses anticipated impacts on the environment. TVA also concludes that other agency comments have been adequately addressed and has decided to adopt the USACE EA. It is attached and incorporated by reference. USFWS concurs with the finding in the KYTC BA that the proposed action is not likely to adversely affect the federally listed gray bat, Indiana bat, Price's potato bean, or bald eagle; and that requirements of Section 7(c) of the Endangered Species Act of 1973, as amended, are fulfilled. TVA has also evaluated the project for compliance with Executive Order 11988 on Floodplain Management. Since the purpose of the project is to extend an existing state road, it is not possible to totally avoid floodplains. Impacts on floodplains would be minimized by perpendicular crossings, bridges, properly sized culverts, and where appropriate, avoiding stream relocations. Based on review of plans and evaluation included in the USACE EA, TVA finds that there are no other practicable alternatives to the proposed plan that would have less adverse impacts on floodplains, wetlands, or the aquatic environment.

TVA has determined that its Section 26a approval actions along this route would have no effects on historic properties. This FONSI is contingent upon successful

implementation of TVA General and Standard Conditions (5a-e and 6a-i), BMPs, and the other mitigation measures previously identified in the USACE EA. This includes all conditions of the Section 401 water quality certification. Furthermore, it includes the implementing specifics of the final Wetlands and Streams Mitigation Plans as well as the commitment to remove trees from the Cotton Riley Site only between October 15 and March 31 to avoid the potential for impacting federally endangered bats.

Based on the EA, we conclude that the Section 26a approvals under the TVA Act would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.

April 3, 2006

Jon M. Loney, Manager NEPA Policy Environmental Stewardship and Policy Tennessee Valley Authority Date Signed

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